

Coastal Pollutant Remediation Grant (CPR)





Nonpoint Source Pollution

Contamination which includes but is not limited to sediments, nutrients, pathogens, and pollutants that collect in waterbodies from stormwater runoff and boat waste discharges.

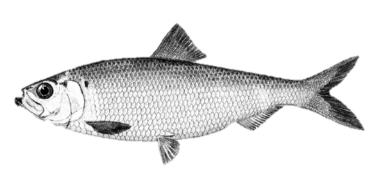
301 CMR 26

Massachusetts Office of Coastal Zo Management Cristina Kennedy <u>cristina.kennedy@mass.gov</u> FY2020 Pre-RFR Meeting



CPR Goals: Coastal Habitat & Water Quality

 Address stormwater runoff and boatwaste pollution affecting coastal resources







SEA CLAM



SOFT SHELL STEAMERS



RAZOR CLAM



MUSSEL



OYSTER



QUAHOG



SCALLOP



Conditional Opening- Call for Status



No Shellfish Harvesting



CPR Goals: Coastal Habitat & Water Quality

 Remove waters with a connection to the coast from MassDEP's integrated list of (impaired) waters

Water Body Segments - Rivers and Streams Category

2 -Attaining some uses; other uses not assessed

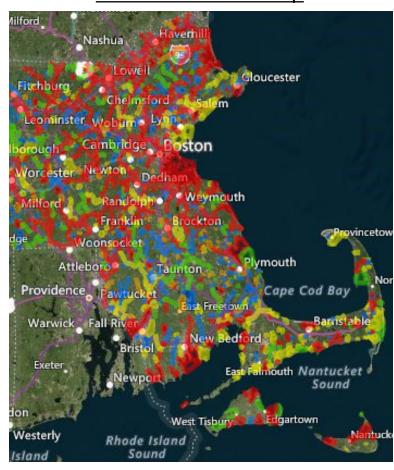
3 - No uses assessed

— 4A - Impaired - TMDL is completed

4C - Impairment not caused by a pollutant

5 - Impaired - TMDL required

2014 Interactive Map



2016 Draft Integrated List of Waters & 2014 Interactive Map https://www.mass.gov/lists/integrated-lists-of-waters-related-reports http://maps.massgis.state.ma.us/images/dep/omv/il2014viewer.htm



CPR Since 1996

- > \$11 million
- 189 awards
- 57 communities
- 140+ BMPs* constructed



Cape and Islands

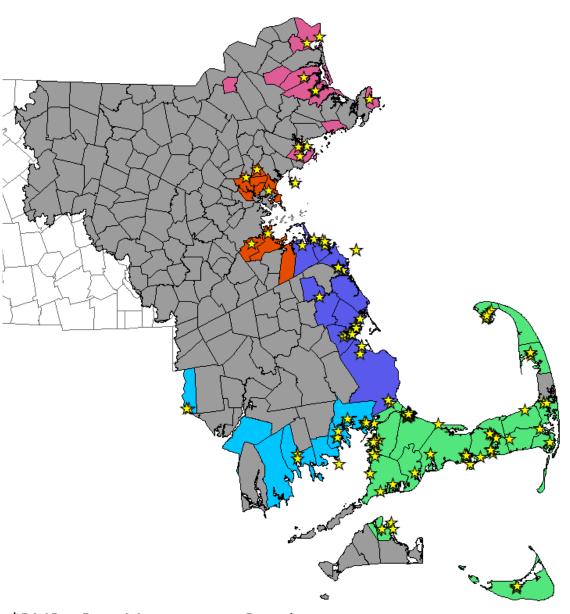
North Shore

South Coastal

South Shore

Eligible

Constructed BMPs

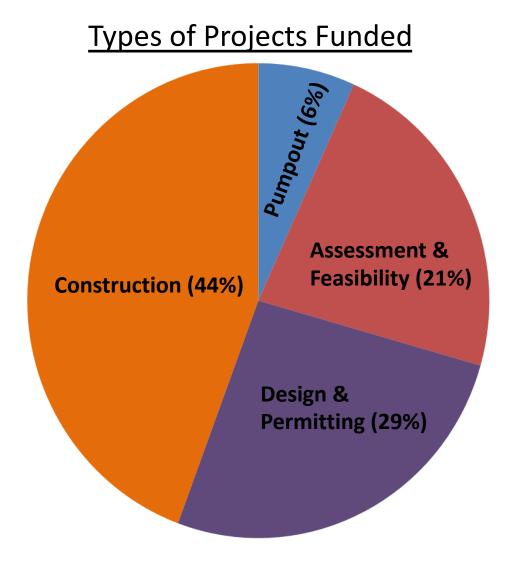


*BMP = Best Management Practice



CPR Eligible Projects

- Watershed Assessment
 - Identification and prioritization of sources of stormwater pollution
 - Feasibility and siting of appropriate BMPs
- Design and Construction*
 - BMPs to address stormwater pollution
 - Boat-waste pumpout stations serving mainly commercial vessels
- NEW Capacity Building Activities



^{*}Public land or easement in perpetuity



New Category: Capacity Building Activities

- Ensure long-term maintenance and function of constructed stormwater infrastructure
- Encourage the use of green infrastructure and low impact development designs in future construction
- Development of local stormwater or low impact development bylaws/ordinances.
- Green infrastructure operations & maintenance trainings for municipal staff
- Guidance documents or case studies of successful projects



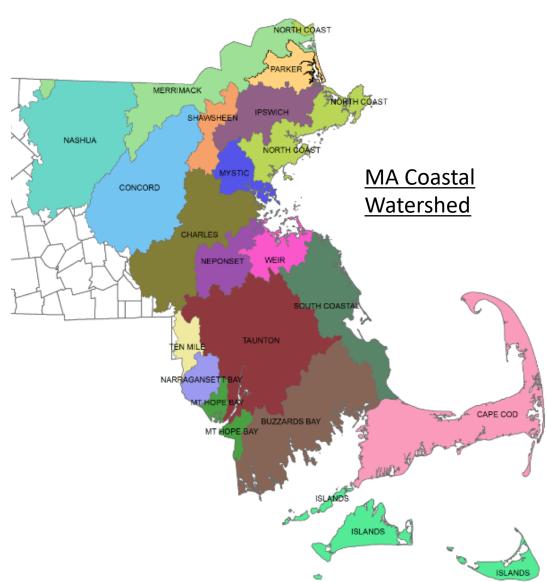
Green Infrastructure Maintenance Training
Three Bays Project, Barnstable Fall 2019
Association to Preserve Cape Cod & Horsley Witten Group

^{*}Public outreach and BMP signage cannot be funded by CPR, but can be used as match



CPR Eligible Communities

- Municipalities in the coastal watershed (>200)
 - Partnerships strongly encouraged
- Demonstrate both:
 - Impairment to local waters or impact to coastal resource
 - Direct connection to coastal waters
- Municipal Vulnerability Preparedness (MVP) bonus





CPR FY21 Logistics: Estimated Timeline

- RFR* out in late April
 - Contact us now!
- Two week Q&A period
 - e-mail only
- Proposals due early June
- Contracting September
- June 30, 2021
 - All tasks must be completed





CPR FY21 Logistics

- Funding Levels FY20
 - Up to \$500k
 - \$175k max (construction)
- Applicants must provide at least 25% of the total project cost as match
- Link to RFR posted on CPR grant page
 - www.commbuys.com/bso/
- Electronic submission only
 - Read RFR carefully for instructions



To receive an email announcement that the RFR is posted, please email Cristina Kennedy at cristina.kennedy@mass.gov.



CPR: General Application Advice

- Read the current RFR carefully
- Do not assume reviewer knowledge
- Pay attention to evaluation criteria in the RFR
- Work within the timeline (less than one year)
 - Set up for multiple grants
 - Combine with other funding

- Link the proposed BMP (or project) to the pollutant of concern, and impact to coastal habitat & water quality
- And address CPR priorities.....
 - 0&M
 - Climate Resilience



CPR Priorities: Operations & Maintenance

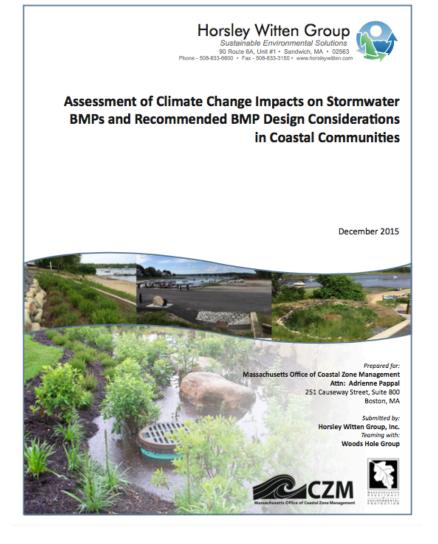
- Demonstrate the capacity for longterm O&M
 - Include DPW staff in all phases
 - Knowledge of BMPs
 - Equipment
 - Maintenance records
 - O&M Plan and Training





CPR Priorities: Climate Resiliency

- Site and design stormwater BMPs to increase treatment effectiveness and long-term resilience to climate change impacts
 - Increased Precipitation & Drought
 - Increased Storms
 - Sea Level Rise
 - Groundwater Table Rise



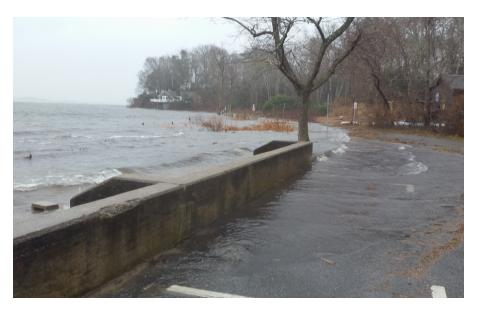


Barnstable: Three Bays Project

Year (Award)	Project Type	Constructed BMPs
2018 (\$59,000)	Assessment, BMP Prioritization, Designs	
2019 (\$209,000)	Design & Permitting of 2 Priority Locations, Construction	Gravel Wetland
2020 (\$156,000)	Final Designs & Construction	Bioretention and Dry Swales

CPR Goals Addressed

- Target nutrients to reduce eutrophication to protect and restore coastal habitats (eelgrass beds, salt marsh)
- Target bacteria to reduce shellfishing and beach closures
- Expand the use of green infrastructure
- Site, design and build stormwater infrastructure to increase long-term function and climate resilience



Rope's Beach Flooding, Winter Storm Riley, March 2018, Dale Saad



Barnstable: Project Strengths & Highlights

- Broke project into several, phases, can continue to build on their work
- New England Program (SNEP) grants, able to leverage funds to further priority site designs and construct additional projects project
- Strong partnership with Association to Preserve Cape Cod as well as Barnstable Land Trust, Barnstable Clean Water Coalition and Horsley Witten Group
- Strong commitment from DPW
 - O&M Green Infrastructure Trainings
 - Education & Outreach



Prince Cove Sand Filter and Rain Garden



Rope's Beach Gravel Wetland Construction

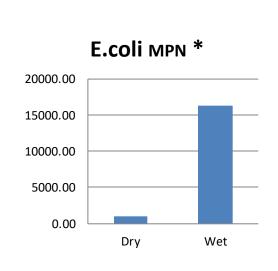


Milton: Unquity Brook Project

Year (Award)	Туре	Constructed BMPs
2016 (\$66,000)	Assessment, Water Quality Sampling, BMP Prioritization, Conceptual Designs	
2017 (\$18,000)	25% Designs at 4 Priority Sites	
2019 (\$19,000)	Final design, Permitting, and Construction	Bioretentions connected by a water quality swale

CPR Goals Addressed

- Target nutrients and sediments to protect diadromous fish habitat (Rainbow Smelt)
- Expand the use of green Infrastructure
- Target bacteria to address an impaired waterbody (Neponset River)





Unquity Brook Outfall Sampling



Milton: Project Strengths & Highlights

- Broke project into several small, manageable phases
- Partnership with Neponset River
 Watershed Association
- Active member of the Neponset Stormwater Partnership
- Dedicated stormwater coordinator to manage project (SW Utility)
- In-house designs to reduce project cost
- Paired bioretention with demonstration rain garden at Milton Police Station



Demonstration Rain Garden at Entrance of Milton
Police Station

Salem: North River and Winter Island Green Infrastructure

Year (Award)	Type	Constructed BMPs
2013 (\$41,000)	Design	
2016 (\$196,000)	Construction	Linear bioretentions, FocalPoint biofiltration system, Catch basin inserts
2017 (\$79,000)	Design & Permitting	
2019 (\$200,000)	Construction, City-wide Assessment	Bioretention, water quality swale, FocalPoint biofiltration system, catch basin insert

CPR Goals Addressed

- Target nutrients and sediments to protect diadromous fish habitat (Rainbow Smelt, American Eel)
- Expand the use of Green Infrastructure
- Target pollutants (untreated urban runoff) to address an impaired waterbody (Salem Sound)
- Site, design and build stormwater infrastructure to increase long-term function and climate resilience



Rainbow Smelt (SSCW)



Salem: Project Strengths & Highlights

- Partnership with Salem Sound Coastwatch, New England Civil Engineering Corp.
- Build on Winter Island Park
 Comprehensive Master Plan
- Commercial Street "Salt Marsh"
- Winter Island Education & Outreach





Salt tolerant plantings can handle occasional flooding

See *Winter Island Rain Garden 2019*, a video on the project produced by the Greenscapes North Shore Coalition.



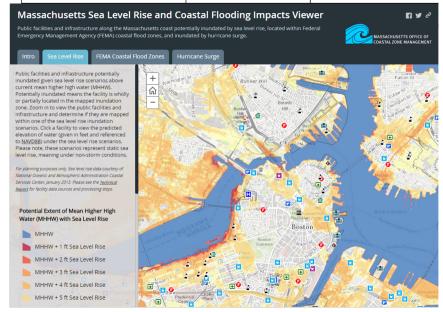
MA Tools & Resources

- Stormwater funding opportunities
 - https://www.mass.gov/service-details/available-funding-for-stormwater-projects-in-massachusetts
- CZM Grant Viewer (CPR 2014-present)
 - https://www.mass.gov/service-details/czm-grant-viewer
- EPA and MassBays Green Infrastructure Handbook
 - http://www.mass.gov/eea/docs/mbp/publications/massba ys-green-infrastructure-handbook.pdf
- BSWC Stormwater Best Management Practices Guidance Documents (urban focus)
 - http://www.bwsc.org/sites/default/files/2019-01/stormwater_bmp_guidance_2013.pdf
- StormSmart Coasts Coastal Landscaping
 - https://www.mass.gov/service-details/stormsmart-coastscoastal-landscaping-in-massachusetts
- MA Climate Change Clearinghouse
 - http://resilientma.org/
- CZM Sea Level Rise Viewer:
 - http://www.mass.gov/eea/agencies/czm/programareas/stormsmart-coasts/flooding-impacts-viewer/

Available Funding for Stormwater Projects in Massachusetts

This table describes grant and loan programs that fund stormwater and water quality projects.

Funding Source	Funding Agency	Eligible Projects
§319 Nonpoint Source Competitive Grants	Massachusetts Department of Environmental Protection (MassDEP)	Stormwater Best Management P BMP construction, stormwater ut education and outreach
§604b Water Quality Management Planning Grants	MassDEP	Water quality assessment and w management planning, BMP des utilities
Buzzards Bay Municipal Mini Grants	Buzzards Bay National Estuary Program	BMP design, boat-waste pumpor monitoring/assessment
Clean Water State Revolving Fund Loans	MassDEP	Stormwater management planning construction, stormwater utilities
Coastal Pollution Remediation Grants	Massachusetts Office of Coastal Zone Management	BMP design, BMP construction, pumpouts, water quality monitori
Community Development Block Grant Entitlement Program	U.S. Department of Housing and Urban Development	Flooding and drainage improvem capacity building





Thank you! Talk to us now (RFR out soon!)

Massachusetts Office of Coastal Zone Management

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Massachusetts Bays and Buzzards Bay National Estuary Programs

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www.mass.gov/service-details/coastal-pollutant-remediation-cpr-grant-program